

## UNITED STATES DEPARTMENT OF COMMERCE

## **Patent and Trademark Offic**

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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

08/997, 202 12/23/97 MYERS

IM31/0406 — EXAMINER
PIAZZA, G

MACMILLAN SOBANSKI AND TODD ONE MARITIME PLAZA 4TH FLOOR 720 WATER STREET TOLEDO OH 43604 ART UNIT PAPER NUMBER

DATE MAILED:

04/06/99

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 



## Office Action Summary

Application No. 08/997,202 Applicant(s)

Gerald L. Meyers

Examiner

Gladys Piazza

Group Art Unit 1733

Responsive to communication(s) filed on	,
☐ This action is <b>FINAL</b> .	
☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is set to expire is longer, from the mailing date of this communication. Failure to response application to become abandoned. (35 U.S.C. § 133). Extensions of t 37 CFR 1.136(a).	ond within the period for response will cause the
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	
☐ Claim(s)	
☐ Claimsa	
Application Papers	
☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.	
☐ The drawing(s) filed on is/are objected to b	
☐ The proposed drawing correction, filed on is ☐approved ☐disapproved.	
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119	
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).	
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been	
☐ received.	
received in Application No. (Series Code/Serial Number)	
$\square$ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).	
*Certified copies not received:	
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).	
Attachment(s)	
☑ Notice of References Cited, PTO-892	
<ul><li>☐ Interview Summary, PTO-413</li><li>☐ Notice of Draftsperson's Patent Drawing Review, PTO-948</li></ul>	
□ Notice of Informal Patent Application, PTO-152	
SEE DEFICE ACTION ON THE FOLL	OWING DAGES

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**DETAILED ACTION** 

Specification

1. The disclosure is objected to because of the following informalities: On page 4 line 12

"similar to Fig. 3" should be "Fig. 2".

Appropriate correction is required.

Claim Objections

2. Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for

failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the

claim(s) in independent form. It is unclear as to how claim 12 further limits claim 1.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and, distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

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the invention. It is unclear as to what the applicant intends in claim 12 that is not inherent in claim 1.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-3, 8, 9, 10, and 12 are rejected under 35 U.S.C. §103 as being unpatentable over admitted prior art and as conventional state of the art as evidenced by Duck et al. (U.S. Patent No 5,064,494) and Challenger et al. (U.S. Patent No. 4,528,057). It is known to glue balanced weights on driveshafts (specification p.2, lines 14-16). It is well known in the adhesive bonding art to provide for temporary initial bonding by employing quick setting adhesives or adhesive portions with full bonding occurring at a later state with a slower setting adhesive or adhesive portion as evidenced, for example by Duck, which shows a process that uses microwave energy to quick set a portion of the adhesive for a windshield on a motor vehicle and to allow the remainder of the adhesive to set later (column 2, lines 20-35). Challenger is directed to adhesive bonding in general and teaches quick setting a first adhesive portion and allowing for delayed setting of the remainder to speed up the manufacturing process (column 1, lines 15-20 and column 2, lines 39-51). It would have been an obvious expedient to one of ordinary skill in the

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art to provide quick setting/slow setting adhesive portions to speed up manufacture involving bonding steps such as in the manufacture of driveshafts bonded with glued balance weights. As to claim 3, it would be obvious to quick set an adhesive on a peripheral surface as shown in Duck, where opposite sides of the windshield are quick set (column 2, lines 26-34) and the curing of the periphery (outer edge) portion of the adhesive is employed (column 5, lines 45-50). As to claim 8, it is considered an obvious expedient to press two articles against one another to spread the adhesive since it is well known per se to press articles together to spread adhesives to a peripheral portion of the articles to be joined. As to claim 9, Duck utilizes microwave energy as a method of setting the first portion of the adhesive, it would be obvious to substitute other forms of radiant energy for microwave energy (column 2, lines 20-23). As to claim 10, Challenger utilizes heat as a method of setting a first portion of the adhesive, it is obvious to use known curing techniques for different adhesive applications (column 1, lines 23-25 and 66-68).

7. Claims 4-7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duck and Challenger as applied to claims 1 and 3 above, and further in view of Riebschleger (U.S. Patent No. 5,435,720) and Albrecht et al. (U.S. Patent No. 5,875,171). Riebschleger discloses a first article (tooth) adhesively bonded to a second article (dental bracket) with a serrated outer peripheral surface (openings or notches added to the base) where excess adhesive extends (emanates) from the peripheral surface of the second article (periphery of the base plate) and is directed up along the sides of the second article for the purpose of providing a positive mechanical lock of the second article to the adhesive (column 2, lines 30-50 and column 4,

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lines 4-25). Albrecht also discloses two articles (disk and spacer) adhesively bonded with a mechanical interlock provided by an appropriate texture on one of the articles for the improvement of the contact of the two surfaces (column 2, lines 45-55 and column 4, lines 3-9). As for claims 5 and 6, Riebschleger discloses a thin rim portion of the second article (flat base plate of dental bracket) which also has a serrated edge (notches) as described above (column 3, 57-68). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use adhesive bonding techniques such as quick setting/ slow setting adhesive portions with articles of different shapes that improve the bonding of the articles.

8. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duck and Challenger as applied to claim 1 above, and further in view of Welsh et al. (U.S. Patent No. 5,778,737). As to claim 7, it is well known to join two articles together that conform to the same shape, for example Welsh discloses a method of securing a second article (balanced weight) on a first article (driveshaft) where the weight is curved to conform to the outer diameter of the driveshaft (column 2, lines 1-3 and 49-53). As to claim 13, it is known to employ an aperture in an article (balanced weight) so that the adhesive material (molten aluminum) flows through the aperture such that a portion of the adhesive material extends over the outer surface of the article, as exemplified in Welsh, which is directed to a balanced weight secured to a driveshaft by applying molten aluminum through an aperture in the balance and overflows, forming a "cap" over the surface of the weight (column 3, lines 11-15). It is obvious to apply

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techniques that improve the adhesive bond of two articles from the spot welding of a balanced

weight to a driveshaft to adhesively bonding a balanced weight to a driveshaft.

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duck and

Challenger as applied to claim 1 above, and further in view of Wolinski et al. (U.S. Patent

No. 4,126,504). It is well known when joining two articles to apply an adhesive to one article

and a catalyst or activator to the other article for the purpose of simplifying and speeding up the

adhesion process as exemplified in Wolinski, which discloses a method of applying an activator

to one article surface and an adhesive to another article surface for a wide range of applications

in mass production (column 1, line 28 and column 2, line 66 to column 3, line 2). It would have

been obvious to one having ordinary skill in the art at the time of the invention to use this method

of joining two articles when employing adhesion methods in any manufacture process including

the manufacture of driveshafts with adhesively bonded balance weights.

10. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Gladys Piazza whose telephone number is (703) 305-1271.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Ball may be reached at (703)308-2058. The fax number for this group is

(703)305-7718.

Supervisory Patent Examiner

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Technology Center 1700

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)308-0661.

GP

March 25, 1999